

The Claims

What is claimed is:

5 1. A composite fermented milk product comprising a pot defining a filling
volume and containing distinct adjoining masses including a first mass comprising a
fermented milk base or at least one flavoring composition and a second mass comprising
a fermented milk base, wherein the masses are of contrasting colors and are arranged side by
side such that there is no substantial migration of one mass into the other and each mass is
10 accessible for consumption.

 2. The product of claim 1 wherein the pot has a base, at least one sidewall
extending from the base for defining the filling volume and an open top, and the masses are
arranged along the sidewall so that each is accessible through the open top.

15 3. The product of claim 2 wherein the sidewall has a cylindrical or frustoconical
shape and a circular, oval or square open top, there are two distinct adjoining masses with a
median surface is formed at an interface between the masses within the volume of the pot,
and each mass is a fermented milk base.

20 4. The product of claim 3 wherein the median surface is twisted.

 5. The product of claim 2 wherein the masses are arranged to extend along the
sidewall in a non-linear manner.

25 6. The product of claim 1 comprising more than two distinct adjoining masses
which meet at a common vertical axis of symmetry within the volume of the pot, with at least
one of the masses not being a fermented milk base.

30 7. The product of claim 1 wherein the fermented milk base of at least one of the
masses comprises:

 from about 50 to 70 % by weight lactic curd of plastic consistency of about 12 to 22
% dry matter by weight,

 from about 5 to 20 % by weight cream, and

35 from about 10 to 30 % by weight of a sweet or fruit preparation.

8. The product of claim 7, wherein the sweet or fruit preparation in the fermented milk base is stabilized with a stabilizer in an amount of preferably from about 0.5 to 2 % by weight .

5 9. The product of claim 7, wherein the fermented milk base is aerated to an overrun of up to 120 %.

10. The product of claim 1, wherein at least two masses are present and each mass has a global viscosity of between 5000 and 15000 mPa.s.

10 11. The product of claim 10, wherein the global viscosity of each mass is about the same.

15 12. A process for the production of a composite fermented milk product which comprises:

providing a pot that defines a filling volume;
separately preparing first and second adjoining masses including a first mass comprising a fermented milk base or at least one flavoring composition and a second mass comprising a fermented milk base; and
20 concomitantly side by side filling of the pot with substantially equivalent volumes of at least the first and second masses;
wherein the viscosities and temperatures of the masses are controlled so that there is no substantial migration of one mass into the other and each mass is accessible for consumption.

25 13. The process of claim 12 wherein the temperatures of the masses is controlled to be within the range of from about 0° C to 50° C and the viscosities of the said masses are adjusted to values corresponding to from about 5000 to 15000 mPa.s.

30 14. The process of claim 12 which further comprises feeding two distinct masses of plastic consistency to hoppers, in which controlled valves allow feeding of the two masses to dosing cylinders and from there by dosing pistons through pipes to a filling head comprising two essentially parallel and vertical filling nozzles and from there into pots carried by a conveyor belt or chain moving step by step underneath,
35 and in which the filling of a pot consists of two half-portions and each half- portion is metered by means of a portion control mechanism.

15. The process of claim 14, in which the portion control mechanism comprises upstream of the nozzle a connecting pipe through which the product is delivered to the nozzle and which may be closed and opened by means of a controlled valve, in which the valve is upstream of a passage in the nozzle, the metering chambers consist of the piston cylinders and the pipe section upstream of the valve and in which the passageways including the connecting pipes and the passages in the nozzles provide symmetric flow paths for the distinct masses forming the half-portions for improved filling accuracy whilst limiting steric hindrance and providing for a compact design of the filling head.

16. The process of claim 14, wherein the dosing pistons are driven individually to allow for adjustment of dosing speed, by means of a variator of the dosing piston driving motor, which provides for slightly delayed filling of one mass respective to the other for accurate side by side filling when the viscosities of the masses are not exactly the same.

17. The process of claim 14, wherein for proper filling without any air pockets being formed, the filling head preferably is mounted on an vertically movable device by which the nozzles descend into the pots in proximity of their bottoms and fill them while the device lifts the nozzles.

18. The process of claim 12, wherein filling of the pot is carried out under rotation so that anon-linear masses can be filled and arranged in the pot.

19. The process of claim 12 wherein more than two distinct masses are provided such that they meet at a common vertical axis of symmetry within the volume of the pot, with at least one of the masses not being a fermented milk base.
with at least one mass not being a fermented milk.

20. The process of claim 12 wherein each mass has a global viscosity of between 5000 and 15000 mPa.s and the fermented milk base of at least one of the masses comprises:
from about 50 to 70 % by weight lactic curd of plastic consistency of about 12 to 22 % dry matter by weight,
from about 5 to 20 % by weight cream, and
from about 10 to 30 % by weight of a sweet or fruit preparation.